U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, DC 20549

Attn: Amanda Ravitz
Daniel Morris
Jeanne Bennett
Brian Cascio

Re: Capnia, Inc.

Amendment No. 7 to Registration Statement on Form S-1 Filed September 12, 2014 File No. 333-196635

Ladies and Gentlemen:

On behalf of Capnia, Inc. (the "Company"), we submit this letter in response to oral comments from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") received via telephone on September 15, 2014 relating to the Company's Registration Statement on Form S-1 (File No. 333-196635) filed with the Commission on September 12, 2014 (the "Registration Statement").

In this letter, we have paraphrased the oral comments from the Staff in italicized type and have followed each comment with the Company's response. Capitalized terms used but not defined herein shall have the meanings ascribed thereto in the Registration Statement. Except as otherwise specifically indicated, page references herein correspond to the page of the Registration Statement. References to "we," "our" or "us" mean the Company or its advisors, as the context may require.

Prospectus Cover

1. On the cover of the prospectus, you state that the offering will not be consummated unless company insiders collectively purchase a minimum of \$6,000,000 of units in the proposed offering. Please explain why this does not compromise the status of this offering as one that is underwritten on a "firm commitment" basis.

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RESPONSE TO COMMENT 1: The Company acknowledges the Staff's comment and respectfully submits that the referenced language does not compromise this offering's firm commitment underwriting.

The Company added the referenced language which conditions the consummation of the offering on the purchase by Company insiders of a minimum of \$6,000,000 of units after FINRA advised counsel to the underwriters that it could not calculate underwriter compensation using the three-tiered compensation structure agreed upon between the Company and the underwriters, which provides for a lower underwriting commission for sales made to affiliate purchasers than for sales made to non-affiliate purchasers if the offering was not conditioned upon a minimum level of participation by affiliate purchasers. FINRA advised counsel to the underwriters that if consummation of the offering was not conditioned on the participation by affiliates in a specified minimum amount that it would be required to calculate underwriter compensation on the full amount of the offering using the higher commission applicable to sales to non-affiliates with the result being that underwriter compensation for the transaction would be deemed to be unreasonable. As disclosed in the prospectus, entities associated with our existing stockholders Vivo Ventures and our Chairman, Ernest Mario, have indicated to us their interest in purchasing up to \$6,000,000 of units in this offering at the offering price. There is, however, no commitment by any of these entities to purchase any securities in this offering.

Subsection (a) of Item 508 of Regulation S-K requires the issuer to "[s]tate briefly the nature of the obligation of the underwriter(s) obligation to take the securities." The Instruction to Paragraph 508(a) provides that "[a]ll that is required as to the nature of the underwriters' obligation is whether the underwriters are or will be committed to take and pay for all of the securities if any are taken, or whether it is merely an agency or the type of "best efforts" arrangement under which the underwriters are required to take and pay for only such securities as they may sell to the public. Conditions precedent to the underwriters' taking the securities, including "market-outs," need not be described except in the case of an agency or "best efforts" arrangement."

In a firm commitment underwriting, the underwriters agree to purchase all of the securities in an offering, subject to the satisfaction of agreed-upon conditions precedent which are set forth in an underwriting agreement, regardless of whether or not they can sell those securities to customers. The form of Underwriting Agreement that we have previously filed with the Commission provides that the underwriters will be obligated to purchase all of the Firm Units (as defined in the Underwriting Agreement) indicated therein subject to the satisfaction of certain closing conditions.

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One of the aforementioned closing conditions is that Participants (as defined in the Underwriting Agreement)—i.e., certain affiliates of the Company—purchase a minimum of \$6,000,000 of Units (as defined in the Underwriting Agreement) and deliver payment in full for those Units to the underwriters prior to the closing of the offering. If this condition is not satisfied, the obligation of the underwriters to purchase all of the Firm Units will automatically terminate. If any of the other conditions are not satisfied, then the underwriters have the ability to terminate their obligation to purchase all of the Firm Units. However, if this condition (as well as the other conditions specified therein) are satisfied, then the underwriters must abide by their commitment to purchase all the Firm Units pursuant to the Underwriting Agreement. There is no circumstance under which the underwriters will purchase only a portion of the Firm Units. The Company therefore believes, based on the language contained in the Instruction to Item 508(a) and the terms of the Underwriting Agreement, that the obligation of the underwriters under the Underwriting Agreement is a firm commitment obligation, subject to the satisfaction of certain conditions precedent.

Capitalization, page 58

2. In the capitalization table on page 58, the pro forma, as adjusted additional paid-in capital as of June 30, 2014 is \$92,662. Please explain the large jump from the number in Amendment No. 6 to the Registration Statement filed August 25, 2014, which was \$73,184.

RESPONSE TO COMMENT 2: The Company acknowledges the Staff's comment and will correct the typographical error in the capitalization table on page 58 in a revised Registration Statement to be filed with the Commission as soon as is practicable. The pro forma, adjusted paid-in capital as of June 30, 2014 is \$72,662.

Security Ownership of Certain Beneficial Owners and Management, page 137

3. At the end of the third paragraph, the Company estimated that post-offering insider ownership would equal approximately 68%, including ownership of approximately 58% by entities associated with Vivo Ventures and approximately 15% by Ernest Mario. Please explain why the two ownership percentages do not collectively equal 73%.

RESPONSE TO COMMENT 3: The Company acknowledges the Staff's comment and respectfully submits that the insider ownership as calculated per Regulation S-K is 68%. Instruction 2 to Item 403 of Regulation S-K specifies that beneficial ownership shall be determined in accordance with Rule 13d-3 under the Exchange Act. Rule 13d-3(d)(1)(i) specifies that "[a]ny securities not outstanding which are subject to such options, warrants, rights or conversion privileges shall be deemed to be outstanding for the purpose of computing the

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percentage of outstanding securities of the class owned by such person but shall not be deemed to be outstanding for the purpose of computing the percentage of the class by any other person." This convention was used to calculate ownership in the beneficial ownership table and is the source of the discrepancy in the numbers. Since derivative securities such as options and warrants are used to separately calculate the percentage ownership for each individual or entity, the denominators for each individual or entity listed in the beneficial ownership table can be—and, in this case, are—different from each other and from the denominator used in the total beneficial ownership calculation to the extent that such individuals or entities own derivative securities.

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

/s/ Elton Satusky

Elton Satusky

cc: Anish Bhatnagar 3 Twin Dolphin Drive, Suite 160 Redwood City, CA 94065

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